- 1 What is claimed is:
- 2 1. A method to elicit an effective antitumoral immune
- 3 response in a patient comprising:
- 4 generating a plurality of tumor associated antigens (TAA) in
- 5 a plurality of cells in the patient,
- 6 inhibiting an immune tolerance response relative to the TAA in
- 7 the patient to enhance the antitumoral immune response,
- 8 activating a plurality of antigen presenting cells (APC) in
- 9 the patient to further enhance the antitumoral immune response,
- triggering an internal vaccine in the patient to at least
- partially elicit the antitumoral immune response, and
- 12 providing an external vaccine to the patient to further elicit
- the antitumoral immune response.
- 14 2. A method as recited in claim 1 further comprising
- qenerating the TAA in a plurality of tumor cells of the patient.
- 16 3. A method as recited in claim 1 further comprising
- 17 preserving the TAA in the patient.
- 18 4. A method as recited in claim 3 wherein preserving the TAA
- 19 further comprises inducing the synthesis of a plurality of stress
- 20 shock proteins (SSP).
- 5. A method as recited in claim 4 wherein inducing the
- 22 synthesis of the SSP comprises administering indomethacin to the
- 23 patient.
- 24 6. A method as recited in claim 4 wherein inducing the
- 25 synthesis of the SSP comprises administering a corticoid compound

- 1 to the patient.
- 2 7. A method as recited in claim 1 further comprising storing
- 3 the TAA in the plurality of cells of the patient.
- 8. A method as recited in claim 7 wherein storing the TAA
- further comprises inducing the synthesis of a plurality of stress
- 6 shock proteins (SSP).
- 7 9. A method as recited in claim 8 wherein inducing the
- 8 synthesis of the SSP comprises administering indomethacin to the
- 9 patient.
- 10 10. A method as recited in claim 8 wherein inducing the
- 11 synthesis of the SSP comprises administering a corticoid compound
- 12 to the patient.
- 13 11. A method as recited in claim 1 wherein generating the TAA
- 14 further comprises inducing protein synthesis in the plurality of
- 15 cells of the patient.
- 16 12. A method as recited in claim 1 further comprising
- inducing protein synthesis in the plurality of cells of the patient
- 18 via administering a pharmaceutical compound to the patient.
- 19 13. A method as recited in claim 12 further comprising
- 20 administering a pharmaceutical compound to the patient comprising
- 21 insulin.
- 22 14. A method as recited in claim 1 wherein generating the TAA
- 23 further comprises administering insulin to the patient.
- 24 15. A method as recited in claim 1 wherein generating the TAA
- 25 comprises administering at least one DNA targeted

- 1 chemotherapeutical to the patient.
- 2 16. A method as recited in claim 15 further comprising
- 3 administering at least one DNA targeted chemotherapeutical
- 4 comprising cyclophosphamide to the patient.
- 5 17. A method as recited in claim 15 further comprising
- 6 administering at least one DNA targeted chemotherapeutical
- 7 comprising methotrexate to the patient.
- 8 18. A method as recited in claim 15 further comprising
- 9 administering at least one DNA targeted chemotherapeutical
- 10 comprising fluorouracil to the patient.
- 19. A method as recited in claim 1 wherein activating the APC
- in the patient comprises administering a cytokine to the patient.
- 13 20. A method as recited in claim 19 further comprising
- administering the cytokine comprising granulocyte-macrophage colony
- 15 stimulating factor (GM-CSF) to the patient.
- 16 21. A method as recited in claim 1 wherein inhibiting the
- immune tolerance response for the TAA comprises administering
- 18 cyclophosphamide to the patient.
- 19 22. A method as recited in claim 1 wherein triggering the
- 20 internal vaccine in the patient comprises inducing cell death in
- 21 the plurality of cells in the patient.
- 22 23. A method as recited in claim 22 further comprising
- inducing immunogenic cell death in a plurality of tumor cells in
- 24 the patient.
- 25 24. A method as recited in claim 22 further comprising

- inducing immunogenic cell death in the plurality of cells in the
- 2 patient via apoptosis.
- 3 25. A method as recited in claim 24 further comprising
- 4 exposing the plurality of cells to cellular stress prior to
- 5 inducing immunogenic cell death in the plurality of cells in the
- 6 patient via apoptosis.
- 7 26. A method as recited in claim 22 further comprising
- 8 inducing immunogenic cell death in the plurality of cells in the
- 9 patient via autoschizis.
- 10 27. A method as recited in claim 26 wherein inducing
- immunogenic cell death in the plurality of cells in the patient via
- 12 autoschizis comprises administering ascorbic acid to the patient.
- 13 28. A method as recited in claim 27 further comprising
- 14 administering the ascorbic acid to the patient intravenously.
- 15 29. A method as recited in claim 27 wherein inducing
- 16 immunogenic cell death in the plurality of cells in the patient via
- 17 autoschizis further comprises simultaneously administering
- 18 menadione to the patient.
- 19 30. A method as recited in claim 29 further comprising
- administering menadione to the patient intravenously.
- 21 31. A method as recited in claim 1 wherein providing the
- 22 external vaccine to the patient further comprises inoculating the
- 23 patient with the external vaccine subcutaneously.
- 32. A method as recited in claim 1 wherein providing the
- 25 external vaccine to the patient further comprises inoculating the

- 1 patient with the external vaccine via intradermal inoculation.
- 2 33. A method as recited in claim 1 wherein providing the
- 3 external vaccine to the patient further comprises inoculating the
- 4 patient with the external vaccine via intramuscular inoculation.
- 5 34. A method to elicit an effective antitumoral immune
- 6 response in a patient comprising:
- 7 completing at least one treatment cycle, each treatment cycle
- 8 comprising,
- 9 administering insulin to the patient during a preparatory
- 10 treatment phase,
- administering at least one DNA targeted chemotherapeutical to
- 12 the patient during the preparatory treatment phase,
- administering cyclophosphamide to the patient during a first
- intermediate treatment phase,
- administering a cytokine to the patient during a primary
- 16 treatment phase,
- 17 administering ascorbic acid to the patient during the primary
- 18 treatment phase,
- 19 administering menadione to the patient during the primary
- 20 treatment phase, and
- 21 administering a hemoderivative composition to the patient
- during a secondary treatment phase.
- 23 35. A method as recited in claim 34 further comprising
- 24 administering the insulin to the patient on each of days one
- 25 through four of the treatment cycle.

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- 1 A method as recited in claim 34 further comprising administering the insulin to the patient on each of days one 2 3 through five of the treatment cycle.
- 37. A method as recited in claim 34 further comprising 5 administering the insulin to the patient each day of the preparatory treatment phase at a daily dosage of approximately 0.3 6 7 international units per kilogram of the patient's body weight.
- 8 38. A method as recited in claim 34 further comprising 9 administering the at least one DNA targeted chemotherapeutical to 10 the patient on each of days one through four of the treatment 11 cycle.
- 12 A method as recited in claim 34 further comprising 13 administering the at least one DNA targeted chemotherapeutical to the patient on each of days one through five of the treatment 14 15 cycle.
 - A method as recited in claim 34 further comprising administering the at least one DNA targeted chemotherapeutical comprising cyclophosphamide to the patient each day of the preparatory treatment phase at a daily dosage in a range of between approximately 100 to 200 milligrams.
 - A method as recited in claim 34 further comprising administering the at least one DNA targeted chemotherapeutical comprising methotrexate to the patient each day of the preparatory treatment phase at a daily dosage in a range of between approximately 2.5 to 12.5 milligrams.

approximately 125 to 250 milligrams.

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- 42. A method as recited in claim 34 further comprising administering the at least one DNA targeted chemotherapeutical comprising fluorouracil to the patient each day of the preparatory treatment phase at a daily dosage in a range of between
- 43. A method as recited in claim 34 further comprising administering the cyclophosphamide to the patient on day five of the treatment cycle.
- 9 44. A method as recited in claim 34 further comprising 10 administering the cyclophosphamide to the patient each day of the 11 first intermediate treatment phase at a daily dosage of 12 approximately 300 milligrams per square meter of surface area of 13 the patient's body.
- 45. A method as recited in claim 34 further comprising administering the cytokine to the patient on each of days eight through twelve of the treatment cycle.
 - 46. A method as recited in claim 34 further comprising administering the cytokine comprising granulocyte-macrophage colony stimulating factor (GM-CSF) to the patient on each day of the primary treatment phase at a daily dosage in a range of between approximately 150 to 250 micrograms.
- 22 47. A method as recited in claim 34 further comprising 23 administering the ascorbic acid to the patient on each of days 24 eight through twelve of the treatment cycle.
- 25 48. A method as recited in claim 34 further comprising

- 1 administering the ascorbic acid to the patient each day of the
- 2 primary treatment phase at a daily dosage of approximately 25 grams
- in a solution of approximately 250 milliliters of a lactate-ringer
- 4 solution.
- 5 49. A method as recited in claim 48 further comprising
- administering the ascorbic acid to the patient intravenously.
- 7 50. A method as recited in claim 34 further comprising
- 8 administering the menadione to the patient on each of days eight
- 9 through twelve of the treatment cycle.
- 10 51. A method as recited in claim 34 further comprising
- administering the menadione to the patient each of day the primary
- treatment phase at a daily dosage of approximately 250 milligrams.
- 13 52. A method as recited in claim 51 further comprising
- 14 administering the menadione to the patient intravenously.
- 15 53. A method as recited in claim 51 further comprising
- administering menadione to the patient orally.
- 17 54. A method as recited in claim 34 further comprising
- administering the hemoderivative composition to the patient on each
- 19 day of the secondary treatment phase.
- 20 55. A method as recited in claim 34 further comprising
- 21 administering an autologous hemoderivative composition to the
- 22 patient on each day of the secondary treatment phase.
- 23 56. A method as recited in claim 34 further comprising
- 24 administering the hemoderivative composition to the patient on each
- of days fifteen, seventeen, nineteen, twenty-two, twenty-four, and

- twenty-six of the treatment cycle.
- 2 57. A method as recited in claim 34 further comprising
- administering cyclophosphamide to the patient each day of a second
- 4 intermediate treatment phase at a daily dosage of approximately 300
- 5 milligrams per square meter of surface area of the patient's body.
- 6 58. A method as recited in claim 57 further comprising
- 7 administering the cyclophosphamide to the patient on day thirteen
- 8 of the treatment cycle.
- 9 59. A method as recited in claim 34 further comprising
- 10 completing a plurality of treatment cycles.
- 11 60. A method of preparation of an autologous hemoderivative
- composition for use in eliciting an effective antitumoral immune
- 13 response in a patient comprising:
- extracting a blood specimen from the patient and forming a
- 15 blood specimen solution,
- separating a supernatant plasma-cell layer from the blood
- 17 specimen solution after settling,
- diluting the supernatant plasma-cell layer in a dilutant
- 19 forming a plasma-cell solution and thereby inducing a hypotonic
- 20 shock,
- cooling and heating the plasma-cell solution and thereby
- 22 inducing a hypothermic shock,
- fractioning the plasma-cell solution by heating to
- 24 predetermined temperature for a predetermined period of time and
- 25 forming a plasma-cell fraction, and

- filtering the plasma-cell fraction prior to administrating to the patient.
- 61. A method of preparation as recited in claim 60 further comprising extracting approximately 20 milliliters of the blood specimen from the femoral artery of the patient into a heparin solution thereby forming the blood specimen solution.
 - 62. A method of preparation as recited in claim 60 further comprising settling the blood specimen solution for approximately one hour and separating the supernatant plasma-cell layer.
 - 63. A method of preparation as recited in claim 60 further comprising diluting the supernatant plasma-cell layer in distilled water at a ratio in a range of approximately 3 to 4 parts distilled water per 1 part supernatant plasma-cell layer, thereby forming the plasma-cell solution.
 - 64. A method of preparation as recited in claim 60 further comprising cooling the plasma-cell solution to approximately minus twenty degrees centigrade for approximately 24 hours.
 - 65. A method of preparation as recited in claim 60 further comprising fractioning the plasma-cell solution by heating to approximately one hundred degrees centigrade for between approximately 8 to 10 minutes.
 - 66. An autologous hemoderivative composition comprising:
 - a plasma-cell solution cooled to approximately minus twenty degrees centigrade for approximately 24 hours, and subsequently heated to approximately 100 degrees centigrade for between

- 1 approximately 8 to 10 minutes, and filtered after cooling,
- 2 said plasma-cell solution being defined by a supernatant
- 3 plasma-cell layer separated from a blood specimen solution and a
- 4 quantity of distilled water, and
- said blood specimen solution comprising a blood specimen
- 6 extracted from a femoral artery of a patient and a heparin
- 7 solution.